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Amendments to the Claims

1. (currently amended) A method for planning stimulation of hyper/hypometabolic cortical areas, said the method comprising:

determining <u>functional</u> anatomical patient data using an imaging method; <u>determining structural anatomical patient data</u>;

navigationally registering the functional anatomical data with the structural anatomical data such that the functional anatomical data are available for navigation;

based on the functional anatomical data, detecting positions of (i) the hyper/hypometabolic cortical areas in a patient's anatomy and (ii):

detecting a position of a stimulator;

at least one of (i) registering and or (ii) referencing the position of the hyper/hypometabolic cortical areas with respect to the position of the stimulator; and determining an optimal positioning for the stimulator on the basis of the relative positional information.

- 2. (original) The method as set forth in claim 1, wherein the detecting step is performed using a medical navigation system.
- 3. (original) The method as set forth in claim 1, wherein the stimulation is planned of hypermetabolic areas related to the manifestation of systemic tinnitus.
 - 4. (cancelled)
 - 5. (cancelled)
- 6. (original) The method as set forth in claim 4, wherein the functional image detection method includes at least one of (i) functional magnetic resonance detection and (ii) positron emission tomography (PET).

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- 7. (original) The method as set forth in claim 1, wherein the detecting step includes using a navigation system to optically detect arrangements of actively or passively emitting markers arranged on the patient's head and on the stimulation means.
- 8. (original) The method as set forth in claim 1, wherein the detecting step includes using a navigation system to magnetically or inductively detect (i) at least one of (a) positional coils and (b) oscillating circuits, arranged on the patient's head and on the stimulator.
- 9. (original) The method as set forth in claim 1, wherein the stimulator includes a cortical stimulation coil.
- 10. (original) The method as set forth in claim 2, further comprising: outputting detected navigational data together with the determined optimal positioning on an image output.
 - 11. (original) The method as set forth in claim 1, further comprising: calibrating the stimulator.
 - 12. (original) The method as set forth in claim 1, further comprising: simulating a field distribution for the stimulator; and determining stimulation areas based on the simulated field distribution.
 - 13. (cancelled)
- 14. (currently amended) A.computer program storage medium comprising a program as set forth in claim 13 which, when it is run on a computer or is loaded onto a computer, causes the computer to perform a method in accordance with claim 1.

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15. (new) A method of stimulating hyper/hypometabolic cortical areas of a patient, the method comprising:

simulating a field distribution for a stimulation coil relative to a position of the stimulation coil;

determining a stimulation area for the stimulation coil relative to a position of the coil;

determining functional anatomical patient data;

determining structural anatomical patient data;

navigationally registering the functional anatomical data with the structural anatomical data such that the functional anatomical data are available for navigation;

detecting the position of the stimulation coil;

navigationally registering the field distribution of the stimulation coil;

registering the position of the functional anatomical data with respect to the position of the stimulation coil; and

positioning the stimulation coil on the basis of the relative positional information.